Case Series: PTSD Symptoms in Adolescent Survivors of "Ethnic Cleansing." Results From a 1-Year Follow-up Study

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ABSTRACT

Objective: The authors describe the psychiatric sequelae of "ethnic cleansing" in adolescent Bosnian refugees, via a 1-year follow-up study. **Method:** Ten Bosnian adolescent refugees from the war in Bosnia-Herzegovina received a baseline assessment within the first year after their resettlement and a follow-up assessment 1 year later. Evaluations included an assessment scale for posttraumatic stress disorder (PTSD) symptom severity. **Results:** At baseline, 3 subjects met criteria for PTSD. At follow-up, this diagnosis persisted in none of these subjects, though 1 subject met criteria at follow-up only. For the group, mean PTSD severity scores at baseline and at follow-up were 8.9 and 4.0, respectively. At baseline, reexperiencing symptoms were present 43% of the time, avoidance symptoms were present 33% of the time, and hyperarousal symptoms were present 33% of the time; at follow-up, these proportions were 35%, 16%, and 18%, respectively. **Conclusions:** Overall, rates of PTSD symptoms diminished during the 1-year follow-up interval, suggesting that they may be transient and not representative of enduring psychopathology. This finding may reflect the relative resiliency of adolescents, as well as a variety of factors that facilitated adaptation in our particular group of adolescent refugees. *J. Am. Acad. Child Adolesc. Psychiatry,* 1999, 38(6):775–781. **Key Words:** adolescents, genocide, posttraumatic stress disorder, trauma.

Beginning in April 1992, Bosnian Serb and Serbian paramilitary and military forces conducted a campaign of "ethnic cleansing" against Muslim and Croat civilians in Bosnia-Herzegovina. Within this context, non-Serb children and adolescents were often separated from their fathers and from other adult male family members—who were sent to concentration camps—and, along with their mothers, spent months fleeing capture or being held in occupied territory. Escape to refugee camps in neighboring countries sometimes resulted in families being reunited with surviving members. Some of these families, in turn, were given the opportunity to emigrate to the United States or elsewhere. At the time that refugee families began to resettle in the United States, during early 1993, a program was developed in the Traumatic Stress Clinic at the Yale Psychiatric Institute to make specialized mental health services available to affected individuals in Connecticut. Beginning in February 1993, and continuing for about 6 months thereafter, the families described in this study were seen through that clinic.

A prior report (Weine et al., 1995a) described the psychiatric assessments and trauma testimonies of a small group of Bosnian adolescent survivors of "ethnic cleansing" evaluated within the first year after their arrival in Connecticut—and within 2 years after the initiation of Serbian aggression. This previous report detailed a wide range of traumatic experiences, including exposure to killing and other acts of violence, disappearance of loved ones without explanation, prolonged separation from family members, destruction of home and other property, detainment in refugee camps, deprivation of food and water, and forced emigration. However, despite considerable levels of traumatization, that study found a relatively low rate of posttraumatic stress disorder (PTSD). Only 4 (25%) of 12 adolescent refugees met *DSM-III-R* criteria for this diagnosis.

This modest rate of the PTSD diagnosis in our group of adolescent refugees was lower than that found in a

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group of adults drawn from the same overall sample of Bosnian refugees (Weine et al., 1995b), and also lower than the rates reported by Kinzie and colleagues (1986) in their study of Cambodian adolescent refugees. The former difference was attributed to the resilience of the adolescents relative to their parents and to their greater ease in acculturation. We attributed the latter difference to a variety of factors, including (1) the relatively shorter duration of exposure to massive psychic trauma; (2) the relatively lesser cultural disruption involved in relocating from Europe to the United States; (3) the relatively more intact families of our subjects; and (4) the possibility that insufficient time had elapsed to allow for the development of delayed-onset PTSD.

With regard to the question of delayed-onset PTSD, an understanding of the time course of PTSD symptom formation can only be obtained through longitudinal study of trauma survivors. There has been very little study of the evolution of posttraumatic symptoms in adolescents (Pfefferbaum, 1997). Kinzie's original study (Kinzie et al., 1986) involved Cambodian adolescent refugees who had suffered severe trauma in Khmer concentration camps as children. Approximately 6 years after the traumatization, half suffered from PTSD. A follow-up study 3 years later (Kinzie et al., 1989) revealed a similar frequency of the PTSD diagnosis. A 6-year follow-up (Sack et al., 1993), during young adulthood, showed persistence of the PTSD diagnosis, though with evidence that symptoms were less frequent and less intense, and with indications of good functional capacity. Sack and colleagues (1994) have also reported an epidemiological study of Cambodian youths and their parents. This report indicates that PTSD could be diagnosed in only approximately one fifth of adolescents and young adults (aged 13–25 years) who were exposed to genocidal trauma about a dozen years previously. However, when an age cohort that approximated that of their original study was analyzed separately (i.e., individuals in their early twenties who had received traumatic exposure during latency), PTSD prevalence was similar to the frequency found in the original follow-up of young adults (Sack et al., 1993). The epidemiological data also indicate lower rates of PTSD in the index subjects than in their parents (Sack et al., 1994). For the parents—but not for the youths—there was an association between PTSD diagnosis and impaired functional capacity (Sack et al., 1995a).

To our knowledge, though, there have been no studies—beginning during the early phase of resettlement—of the evolving psychiatric sequelae of severe trauma in adolescent refugees. The purpose of this study was to examine these issues further by reevaluating the adolescent Bosnian refugees 1 year after their initial assessments, and approximately 2 years after their traumatic exposure. In particular, we hoped to determine whether the PTSD diagnosis and symptoms would become more prominent, through the appearance of a delayed-onset syndrome, or less prominent, due to various ameliorating effects.

METHOD

Subjects

Subjects were 10 Bosnian adolescents (7 males and 3 females), who had been exposed to the traumas of the war in Bosnia-Herzegovina and who had been resettled with their families in Connecticut. All had participated in our initial study of adolescent survivors of "ethnic cleansing" (Weine et al., 1995a), though 2 female subjects from the original study did not participate in the follow-up phase. The family of one of these potential subjects could not be located; the family of the other declined to participate. All subjects were single, had lived in Bosnia prior to their resettlement, and were ethnic Muslims. All except 2 subjects were living with their own nuclear families; the other 2 immigrated with extended families and remained with these families throughout the duration of the study. At the time that subjects entered the study, their ages ranged from 13 to 19 years (mean = 16.1). Our developmental histories revealed that none had experienced developmental or academic problems before the war. Only one subject had a prior history of emotional problems—an apparent dysthymia beginning during childhood.

Subjects and their families had initially been referred by refugee resettlement organizations in Connecticut. For the follow-up phase of the study, the original participants were contacted by telephone or by letter. After complete explanation of the study procedures, written informed consent was obtained from subjects. In the case of minors, assent was obtained from subjects and consent was obtained from a parent or guardian.

Procedures

Detailed descriptions of the procedures for the baseline evaluation are provided in previous reports (Weine et al., 1995a,b). Initially, subjects were evaluated within the first year after their resettlement in the United States. Follow-up assessments were done 1 year later. At baseline and at follow-up, subjects participated in systematic, trauma-focused, clinical interviews that included an assessment scale for PTSD symptom severity.

Interviews were conducted at the Traumatic Stress Clinic of the Yale Psychiatric Institute or, in some cases, at the homes of the refugees. Interviews were performed by 1 or 2 mental health professionals from an interdisciplinary team, assisted by a lay interpreter. All interviewers participated in training sessions in which they were familiarized with the research instruments and with selected background literature. The research instruments were translated into Croatian by a team of interpreters and clinicians; back-translations were used to check accuracy.

Assessment Instruments

During the baseline evaluation, subjects were interviewed with the Communal Traumatic Experiences Inventory (CTEI) (Weine et al., 1995b). This instrument was developed for the study of Bosnian ref-

ugees, based on other screening instruments used for refugees of genocidal trauma (Mollica and Caspi-Yavin, 1991; Mollica et al., 1987; Norris, 1990). The 36-item, clinician-administered questionnaire screens for 30 different kinds of traumatic events that have been commonly associated with "ethnic cleansing." A CTEI score was generated for each subject, indicating the number of different types of traumatic experience endured by that individual.

At baseline and at follow-up, assessment for PTSD diagnosis and symptoms was performed with the PTSD Symptoms Scale (Foa et al., 1993). This scale consists of 17 items, each rated on a 4-point scale, that correspond to the *DSM-III-R* (American Psychiatric Association, 1987) criteria for PTSD; it assesses the number and severity of PTSD symptoms. The PTSD Symptoms Scale has been shown to have high test-retest reliability, good concurrent validity, high interrater agreement, and excellent convergent validity with the Structured Clinical Interview for *DSM-III-R* (Foa et al., 1993). To meet diagnostic criteria for PTSD, a subject must have a requisite number of symptoms in each of the 3 symptom clusters.

RESULTS

PTSD Diagnosis and Symptom Severity

Table 1 summarizes the ages, trauma severity scores, PTSD diagnoses, and PTSD symptom severity scores for all subjects. (Subjects' genders are not indicated, to preserve anonymity.) CTEI scores ranged from 7 to 24 (mean = 14.5), and all but one subject had scores greater than 10. At baseline, 3 subjects met diagnostic criteria for PTSD. At follow-up, the PTSD diagnosis persisted in none of these subjects. One subject, who did not have the PTSD diagnosis at baseline, met criteria at follow-up only. With regard to PTSD symptom severity, 7 subjects showed declining scores and 3 showed increases. For the group, mean PTSD symptom severity scores at baseline and at follow-up were 8.9 and 4.0, respectively.

TABLE 1
PTSD Diagnosis and Symptom Scores at Baseline and at 1-Year Follow-up for Adolescent Bosnian Refugees (N = 10).

		Baseline			Follow-up	
Case No.	Age (yr)	CTEI Score	PTSD Dx	PTSD Sx Score	PTSD Dx	PTSD Sx Score
1	15	7		4	X	14
2	17	13		6		2
3	13	13		1		8
4	19	18	X	14		4
5	15	11		1		2
6	17	11		5		4
7	16	18	X	21		0
8	14	19	X	25		0
9	16	11		3		0
10	19	24		9		6

Note: PTSD = posttraumatic stress disorder; CTEI = Communal Traumatic Experiences Inventory; Dx = diagnosis; Sx = symptom.

TABLE 2
Frequencies of Severity Ratings for Posttraumatic Stress Disorder Symptoms at Baseline and at 1-Year Follow-up (N = 10).

	Baseline Ratings			Follow-up Ratings		
	=0	=1	≥2	=0	=1	≥2
Reexperiencing cluster						
Intrusive memories	3	3	4	5	5	0
Nightmares	8	2	0	8	2	0
Flashbacks	9	0	1	10	0	0
Upset when reminded of trauma	3	6	1	3	7	0
Avoidance cluster						
Avoiding thoughts of the war	1	4	5	6	3	1
Avoiding war reminders	7	2	1	6	3	1
Amnesia	8	2	0	9	1	0
Decreased interest in activities	8	2	0	9	1	1
Feeling cut off from others	8	2	0	10	0	0
Feeling numb	7	1	2	10	0	0
Feeling future is unclear	8	0	2	10	0	0
Hyperarousal cluster						
Sleep disturbance	7	3	0	8	2	0
Irritability	6	2	2	6	4	0
Decreased concentration	9	1	0	7	2	1
Being watchful or on guard	6	2	2	10	0	0
Increased startle response	5	3	2	10	0	0
Reactivity to war reminders	7	2	1	8	2	0

Table 2 shows the frequencies of the various ratings on the PTSD symptom severity scale, for all 17 PTSD symptoms, at baseline and at follow-up. At baseline, no symptom is given a severity rating of 0 in all 10 subjects. Across all subjects and all 17 symptoms, severity was rated at the highest levels (≥2) a total of 23 times. The 2 symptoms for which the highest severity ratings were given most frequently were "intrusive memories" and "avoiding thoughts of the war." At follow-up, 6 symptoms were rated as 0 in all 10 subjects, and, across all subjects and all symptoms, the highest severity ratings were given only 4 times.

At baseline, across all subjects and all symptoms—and when symptom presence is defined as a score of 1 or more—reexperiencing cluster symptoms were present 43% of the time, avoidance cluster symptoms were present 33% of the time, and hyperarousal cluster symptoms were present 33% of the time. At follow-up, these proportions were 35%, 16%, and 18%, respectively.

Case Examples

Case 8. A. is an adolescent boy who lived in a small Bosnian town with his parents and older sister. He had no history of emotional difficulties during childhood. Though the parents had been educated only through sec-

ondary school, the father worked at several jobs in order that the family could enjoy a reasonably high standard of living. A. had many friends, attended school, and aspired to be a tradesman someday. During the war, he was exposed to many traumas. His father was taken to a concentration camp. His mother and her 2 children were then forced out of their home and were threatened repeatedly with death. A particularly traumatic experience for A. was being briefly detained with several other adolescent boys, some of whom were killed soon thereafter.

After being reunited with the father in Switzerland, the entire family emigrated to the United States. At baseline evaluation, A. was 14 years old. At that time, all members of his family met criteria for the PTSD diagnosis. Among our group of adolescent subjects, A. had the second highest CTEI score and the highest PTSD symptom score, and he met diagnostic criteria for PTSD. His Global Assessment of Functioning (GAF) (American Psychiatric Association, 1987) score at that time was 70. In Connecticut, both parents quickly found work. They both learned to use the English language much better than most of the adults in our study. A. attended a local high school and also assimilated well. Within a few months, though, school officials began to notice oppositional behavior, and A.'s parents were encouraged to obtain some treatment for him. This therapy was relatively brief and focused primarily on behavioral control. No significant work was done on the posttraumatic symptoms; no medication was prescribed. The family continued to adapt well during their first year in the United States. Through the parents' hard work, they were able to establish a comfortable lifestyle. They did not live in the vicinity of any other Bosnian families. Still, despite their not having been religiously observant in the past, they traveled a considerable distance to attend Muslim services in order to stay connected with a few other Bosnian families.

At follow-up evaluation, A. no longer met criteria for PTSD; his PTSD symptom score was 0; his GAF score was 90. It is interesting that none of the other family members retained the PTSD diagnosis at follow-up. By this time, A. manifested fewer behavioral problems in school, though he was still slightly oppositional at times. Academically, he was achieving above-average grades. He had many friends and participated in music and sports activities. His parents continued to prosper economically. In addition to their Bosnian friends, they were now socializing with many American neighbors.

Case 1. B. is an adolescent girl of similar age. She, too, was free of emotional problems during childhood. She is the only child of older parents, neither of whom attended secondary school. The family lived in a rural part of Bosnia and were farmers. B. had many friends and was an excellent student. She aspired to become a teacher or a doctor. During the war, both parents were severely traumatized. The father was placed in a concentration camp, where he was threatened and beaten repeatedly and where he witnessed many killings. The mother also witnessed numerous atrocities and endured a forced march on which many people died. B. had less traumatic exposure, largely because her parents sent her to stay with relatives soon after the war started. The family was eventually reunited in Croatia and then emigrated to the United States.

At baseline evaluation, B. was 15 years old. She and her parents had resettled within a few blocks of several other Bosnian refugee families. She was attending a local high school, was making good progress toward learning the English language, and was beginning to assimilate. Her parents, on the other hand, had a very difficult time with English, tended to stay at home, and never found work. The family received public assistance funds. Both parents had high CTEI scores and PTSD symptom severity scores; both met criteria for PTSD. B. had the lowest CTEI score among the adolescents in our study. She had a low PTSD symptom score, and she did not meet diagnostic criteria for this disorder. Her initial GAF score was 85.

By the time of the follow-up evaluation, the family had moved away from their original neighborhood. Apparently, the father felt that B. was being teased by her peers, and he had had some angry confrontations with a few of the local (Bosnian and American) adolescent boys. The family became increasingly isolative, and they finally moved away. Initially, none of their former neighbors knew their whereabouts. Though it was difficult for us to determine the exact nature of the conflicts between B. and her peers, these seemed to stem largely from her family's rural background clashing with the more urban backgrounds of most of their neighbors. By the time of the follow-up evaluation, B. had become as isolative as her parents. She was much more symptomatic than before, manifesting evidence of irritability, depression, anxiety, and suspiciousness. She had begun to have nightmares. Indeed, she had the highest follow-up PTSD symptom severity score among the adolescents,

and she was the only adolescent to meet diagnostic criteria for PTSD at follow-up. She spoke of her increasing preoccupation with the war: "I had to grow up faster than I was supposed to." Though she remained in school, her academic functioning had deteriorated somewhat. Still, she indicated that she hoped to finish high school. Her GAF score had fallen to 65.

It is worth noting that at follow-up, the father's PTSD symptom score had fallen to less than half of his baseline score and that he no longer met criteria for PTSD. The mother, on the other hand, had a slightly higher score at follow-up than at baseline and had one of the highest follow-up scores in our overall study. She continued to meet diagnostic criteria for PTSD.

DISCUSSION

PTSD Symptoms and Syndrome

The adolescent refugees in this study had all experienced multiple, severe traumas as a result of the war in Bosnia-Herzegovina. Given this finding, the frequencies of the PTSD diagnosis—at baseline and at follow-up—are relatively low. Indeed the frequencies of this diagnosis at both evaluation points are lower than we found in the adult subjects from this same study (Weine et al., 1998). Similarly, PTSD symptom severity scores are lower at both evaluation points than in our adult group. In addition, our Bosnian adolescent subjects showed lower rates of the PTSD diagnosis, at baseline and at 1-year follow-up, than did Kinzie's group of Cambodian adolescent refugees at baseline, 3-year follow-up, or 6-year follow-up (Kinzie et al., 1986, 1989; Sack et al., 1993).

The comparison of our adolescent group with our adult group of Bosnian survivors reinforces our previous impression that the adolescents in this study were more resilient and more resistant to the pathological effects of trauma. This finding is consistent with those obtained by Sack and colleagues (1994, 1995a), that PTSD and functional incapacity were less pronounced in adolescent Cambodian refugees than in their parents. The comparison of our group of adolescents with the Cambodian adolescents reinforces our impression that the Bosnian group may have benefited from having been able to remain within their families and that their acculturation from Western Europe to the United States was relatively easier than was this process for the Cambodian adolescents.

Comparison of baseline results with those at follow-up is striking in that none of the adolescents who initially met diagnostic criteria for PTSD did so a year later. Similarly, PTSD symptom severity scores were markedly reduced, though the relative predominance of symptoms from the 3 clusters seemed unchanged. This pattern of symptom and syndrome resolution over the 1-year follow-up interval argues against the significance of delayed-onset PTSD as an explanation for the low rates seen at baseline. Indeed, these results suggest that, in this population, PTSD symptoms may be transient and not representative of enduring psychopathology.

One subject showed onset of PTSD during the follow-up interval. Comparison of survivor B with survivor A suggests that family and community context may play a crucial role in determining the course of posttraumatic adaptation during adolescence. Along this line, several investigators (Jensen and Shaw, 1993; Laor et al., 1996; McFarlane, 1987) have documented the effects of posttraumatic parental adaptation and family functioning on symptom formation in children. And, in their epidemiological study, Sack and colleagues (1995b) showed that the PTSD diagnosis tends to cluster in families. Survivor A had significant traumatic exposure prior to resettlement in the United States, as did other members of his family. However, this subject's parents and older sib appeared to be relatively capable of overcoming their own symptoms, of adapting to the culture, and of supporting him in his assimilation. In the case of survivor B, traumatic exposure, as measured by the CTEI score, was less than for any of the other subjects. Her PTSD symptomatology at follow-up evaluation was less likely attributable to the direct effects of trauma than to the adaptation of her parents. Moreover, her ability to acculturate and to benefit from the support of American and Bosnian adolescent peers seems to have been inhibited by the isolating tendencies of her parents.

In addition to survivor B, there were 2 other individuals whose PTSD symptom severity scores increased during the follow-up interval. In these cases—one boy and one girl—the individuals adapted well, attended school, and made friends in the community. Similarly, both of their families appeared to adapt well. It is interesting that both subjects' fathers suffered from PTSD at baseline evaluation, but no longer met criteria at follow-up. Both subjects' mothers, on the other hand, met criteria for PTSD at both evaluation points. These mild, "subthreshold" symptom increases may represent early indications of clinical exacerbation in these subjects, possibly related to ongoing parental symptomatology, or

they may be reflective of an inherent fluctuation of PTSD symptoms (Kinzie et al., 1989), perhaps in response to various, mild-to-moderate life stress factors.

Our study has several limitations. Our small sample size prevents statistical analysis and makes it difficult to generalize our findings. Furthermore, the validity of our assessments may have been affected by language and ethnocultural differences. In addition, our assessment of traumatic exposure was not repeated at the time of the follow-up evaluation. Given recent data suggesting that memories of war trauma may change over time (Southwick et al., 1997), repeated administration of the CTEI may have provided an additional perspective on our findings. Also, our follow-up interval was relatively short and does not take into consideration any further developments beyond the 1-year time frame. Finally, we have focused on PTSD symptoms and have not fully explored alternative constructs of posttraumatic adaptation which may be more meaningful in a younger population.

Nonetheless, our study provides some useful information concerning the evolving response to catastrophic stress in adolescent refugees over time. We found that the Bosnian adolescents in this study overcame their PTSD symptoms better than their parents did. Also, we found no evidence of a prominent role for delayed-onset PTSD in this group. We attributed this resilience and resistance to several fortuitous circumstances, including predominantly helpful family environments and supportive peer and community relationships. It may be that the adolescents in this group were better able than their parents to form new social connections. This factor, along with the flexibility conferred by personality development during adolescence, appeared to have facilitated their healing processes. Alternatively, it is also possible that these adolescents—for reasons having to do with their developmental phase—are less able than their parents to articulate their distress. It may be that the full impact of their experiences of catastrophic trauma will be seen only during adulthood.

Clinical Implications

For clinicians who evaluate or treat adolescent refugees from genocidal trauma, our preliminary findings may provide several insights. First, the psychopathological sequelae of such trauma should not be assumed always to include the PTSD syndrome. Second, the PTSD syndrome and symptoms, when present, may not be as persistent in adolescent refugees as they often are in adults. Therefore, individuals who meet criteria for this diagnosis at a given point in time should periodically undergo diagnostic reevaluation. Third, our data provide some rationale for interventions that focus on adolescent refugees' abilities to assimilate into their new sociocultural environments, to make friends, and to feel supported in these efforts by their parents and families. Along this line, it would seem that interventions should not only be clinical—and aimed at the symptoms and adaptation of the individual refugee—but they should also be preventive and aimed at strengthening the entire family unit (Weine et al., 1997). Finally, our experience suggests that those adolescents who should be considered most at risk for delayed-onset PTSD after resettlement may be those whose parents have the greatest difficulty in their own adjustments.

Longitudinal studies are needed to clarify better the ways in which adolescents may respond uniquely to genocidal trauma as they move through this developmental stage and beyond. It will be best if such studies examine posttraumatic adaptation not only from the perspective of individual psychopathology, but also from the perspective of individual strengths and resources, as well as that of the overall adaptation of the family system.

REFERENCES

American Psychiatric Association (1987), *Diagnostic and Statistical Manual of Mental Disorders, 3rd edition-revised (DSM-III-R)*. Washington, DC: American Psychiatric Association

Foa E, Riggs DS, Dancu DV, Rothbaum BO (1993), Reliability and validity of a brief instrument for assessing traumatic stress disorder. *J Trauma Stress* 6:459–473

Jensen PS, Shaw J (1993), Children as victims of war: current knowledge and future research needs. *J Am Acad Child Adolesc Psychiatry* 32:697–708

Kinzie JD, Sack WH, Angell RH, Clarke G, Rath B (1989), A three-year follow-up of Cambodian young people traumatized as children. *J Am Acad Child Adolesc Psychiatry* 28:501–504

Kinzie JD, Sack WH, Angell RH, Manson S, Rath B (1986), The psychiatric effects of massive trauma on Cambodian children, I: the children. *J Am Acad Child Psychiatry* 25:370–376

Laor N, Wolmer L, Mayes LC et al. (1996), Israeli preschoolers under Scud missile attacks. *Arch Gen Psychiatry* 53:416–423

McFarlane AC (1987), Posttraumatic phenomena in a longitudinal study of children following a natural disaster. *J Am Acad Child Adolesc Psychiatry* 26:764–769

Mollica RF, Caspi-Yavin Y (1991), Measuring torture and torture-related symptoms. *Psychol Assess* 3:1–6

Mollica RF, Wyshak G, de Marneffe D, Khuon F, Lavelle J (1987), Indochinese versions of the Hopkins Symptom Checklist-25: a screening instrument for the psychiatric care of refugees. *Am J Psychiatry* 144:497–500

Norris FH (1990), Screening for traumatic stress: a scale for use in the general population. *J Appl Soc Psychol* 20:1704–1718

Pfefferbaum B (1997), Posttraumatic stress disorder in children: a review of the past 10 years. *J Am Acad Child Adolesc Psychiatry* 36:1503–1511

Sack WH, Clarke G, Him C et al. (1993), A 6-year follow- up study of Cambodian refugee adolescents traumatized as children. *J Am Acad Child Adolesc Psychiatry* 32:431–437

Sack WH, Clarke GN, Kinney R, Belestos G, Him C, Seeley J (1995a), The Khmer adolescent project, II: functional capacities in two generations of Cambodian refugees. *J Nerv Ment Dis* 183:177–181

Sack WH, Clarke GN, Seeley J (1995b), Posttraumatic stress disorder across two generations of Cambodian refugees. *J Am Acad Child Adolesc Psychiatry* 34:1160–1166

Sack WH, McSharry S, Clarke GN, Kinney R, Seeley J, Lewinsohn P (1994), The Khmer adolescent project, I: epidemiologic findings in two generations of Cambodian refugees. *J Nerv Ment Dis* 182:387–395

Southwick SM, Morgan A, Nicolaou AL, Charney DS (1997), Consistency of memory for combat-related traumatic events in veterans of Operation Desert Storm. *Am J Psychiatry* 154:173–177

Weine S, Becker DF, McGlashan TH, Vojvoda D, Hartman S, Robbins JP (1995a), Adolescent survivors of "ethnic cleansing": observations on the first year in America. *J Am Acad Child Adolesc Psychiatry* 34:1153–1159

Weine S, Vojvoda D, Hartman S, Hyman L (1997), A family survives genocide. *Psychiatry* 60:24–39

Weine SM, Becker DF, McGlashan TH et al. (1995b), The psychiatric consequences of "ethnic cleansing": clinical assessments and trauma testimonies of newly resettled Bosnian refugees. *Am J Psychiatry* 152:536–542

Weine SM, Vojvoda D, Becker DF et al. (1998), PTSD symptoms in Bosnian refugees 1 year after resettlement in the United States. *Am J Psychiatry* 155:562–564